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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/734,608	12/15/2003	Moon-Bae Park	1793.1079	9336
21171	7590	05/11/2005		
STAAS & HALSEY LLP			EXAMINER	
SUITE 700			BRASE, SANDRA L	
1201 NEW YORK AVENUE, N.W.				
WASHINGTON, DC 20005			ART UNIT	PAPER NUMBER
			2852	

DATE MAILED: 05/11/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/734,608	PARK ET AL.	
	Examiner Sandra L. Brase	Art Unit 2852	

*-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --*

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) Responsive to communication(s) filed on \_\_\_\_\_.
- 2a) This action is **FINAL**.                                    2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) Claim(s) \_\_\_\_\_ is/are allowed.
- 6) Claim(s) 1-18 is/are rejected.
- 7) Claim(s) \_\_\_\_\_ is/are objected to.
- 8) Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 15 December 2003 is/are: a) accepted or b) objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All    b) Some \* c) None of:
  1. Certified copies of the priority documents have been received.
  2. Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) Notice of References Cited (PTO-892)
- 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_.
- 4) Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_.
- 5) Notice of Informal Patent Application (PTO-152)
- 6) Other: \_\_\_\_\_.

## **DETAILED ACTION**

### *Drawings*

1. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: 303C, 303M, 303Y, 303K and 154. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled “Replacement Sheet” in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

### *Specification*

2. The disclosure is objected to because of the following informalities: on page 6, line 27, “wasted” should be changed to “waste”.

Appropriate correction is required.

### *Claim Rejections - 35 USC § 103*

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

5. Claims 1, 2, 5, 6, 9, 10, 13, 14, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi (US 5,581,342) in view of Ohmura et al. (US 4,941,022).

6. Yamauchi (...342) discloses an electrophotographic printer, comprising: an image holding body (20) to temporarily hold a toner image when an image is formed; a waste toner collection tank (40) to hold waste toner removed from the image holding body; a waste toner collecting method and device of an electrophotographic printer, comprising: a housing (24) to temporarily hold waste toner removed from an image holding body (20); an exhaust guide member (45) including an exhaust hole (46) through which the waste toner is exhausted; an inlet guide member (47) comprising an inlet path to connect the exhaust hole to an inlet of the waste toner collection tank (40); and an elastic member (83), a compression spring, to elastically support the inlet guide member so that a gap between the exhaust hole and an inlet side of the

inlet path is adjusted (col. 6, lines 4-9; col. 7, lines 31-38; and col. 12, lines 5-13). An auger (48) transfers the waste temporarily held in the housing to the exhaust hole of the exhaust guide member (col. 6, lines 9-12). The method includes the step of closely adhering the exhaust hole and an inlet side of the inlet path to each other (col. 6, lines 4-9; col. 7, lines 31-38; and col. 12, lines 5-13). However, Yamauchi (...342) do not disclose the claimed opening and closing apparatus and method. Ohmura et al. (...022) disclose an opening and closing unit (43) to open and close the exhaust hole. When an exhaust guide (41) descends, the opening and closing unit, including a shutter (43) starts to open the exhaust hole in a state where an exhaust hole (41c) and an inlet side of an inlet path are close to each other (col. 8, lines 4-15; and col. 9, lines 26-48); and when the exhaust guide member ascends, the opening and closing unit completes a closing operation of the exhaust hole before the exhaust hole is spaced from the inlet side of the inlet path (col. 8, lines 4-15; col. 8, line 65 – col. 9, line 9; and col. 9, line 26-48).

7. Claims 3, 7, 8, 11, 15 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi (US 5,581,342) in view of Ohmura et al. (US 4,941,022) as applied to claims 1, 2, 9 and 10 above, and further in view of Taniguchi et al. (US 5,708,952).

8. Yamauchi (...342) in view of Ohmura et al. (...022) disclose the features mentioned previously, but do not disclose the claimed elastic sealing member. Taniguchi et al. (...952) disclose a waste toner collecting device including an elastic sealing member (130) installed to an inlet side of an inlet path to elastically close a gap between the exhaust hole and the inlet side of the inlet path, where the elastic sealing member is attached to the inlet path (col. 11, lines 46-49; and figure 8). It would have been obvious to one of ordinary skill in the art at the time of the

invention to have the claimed elastic sealing member, as disclosed by Taniguchi et al. (...952), so as to provide an added barrier against toner leakage.

9. Claims 4 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yamauchi (US 5,581,342) in view of Ohmura et al. (US 4,941,022) as applied to claims 2 and 10 above, and further in view of Damji (US 4,841,333).

10. Yamauchi (...342) in view of Ohmura et al. (...022) disclose the features mentioned previously, but do not disclose the claimed rack and pinion associated with the shutter. Damji (...333) discloses a shutter with a rack and pinion associated therewith to open and close the shutter (col. 6, line 9 – col. 7, line 60). It would have been obvious to one of ordinary skill in the art at the time of the invention to have the claimed rack and pinion associated with the shutter, as disclosed by Damji (...333), since such a rack and pinion is well known in the art to be part of a mechanism to open and close a shutter.

#### *Prior Art*

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Ura et al. (US 4,313,674), Hagiwara et al. (US 4,849,791), Koiso et al. (US 5,020,697), Okamoto et al. (US 5,132,740), Torimaru et al. (US 5,617,195), Villalobos-Garcia et al. (US 5,634,186), Kato et al. (US 6,014,541), Murakami et al. (US 6,266,511), Nakai et al. (JP 06-012005) and Tsukuda (JP 06-242710) disclose an open and close device to open and close a hole in a waste toner collecting device.

*Inquiry*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sandra L. Brase whose telephone number is (571) 272-2131. The examiner can normally be reached on Monday-Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Arthur T. Grimley, can be reached on (571) 272-2136. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Sandra L. Brase  
Primary Examiner  
Art Unit 2852

May 5, 2005